Claims

1. A method for directing packet entities, said method comprising the steps of:

receiving a first packet entity ;

determining that the packet entity is part of a second packet entity

checking if the first packet entity contains information relating to the direction of said entity;

storing at least part of said first packet entity; and

directing said first packet entity in accordance with said information.

2. A method of claim 1, comprising further steps of:

receiving a third packet entity;

checking if the third packet entity is part of the second packet entity; and

forwarding said third packet entity in accordance with said stored information.

3. A method as claimed in claim 1 or 2, wherein said method is arranged to direct a packet entity to a required bearer of a plurality of bearers.

4. A method as claimed in claim 1,2 or 3 wherein said packet entity is a fragmented packet.

5. A method as claimed in claim 4, comprising the step of determining if the packet is a fragmented packet.

6. A method as claimed in claim 3 or any claim appended thereto, wherein said checking step comprises checking if said packet entity contains information relating to the required bearer.

7. A method of claim 6, wherein the information is at least one of source address, destination address, and identification in a fragment header.

8. A method as claimed in any preceding claim, wherein the storing step comprises storing at least one of a source port, a destination port, and identification in a fragment header.

9. A method as claimed in claim 5 or any claim appended thereto, comprising the step of storing fragmentation related information contained in said packet entity.

10. A method as claimed in any preceding claim, comprising the step of receiving another packet entity after a packet entity containing said direction information has been received and directing said another packet entity in accordance with the direction information.

11. A method for directing a first set of mutually related packet entities, the first set containing a second set of mutually related packet entities; the packet entities of the second set containing information relating to the direction of said packet entities; the second set of packet entities containing at least one packet entity,

said method comprising the steps of:

receiving at least one of said packet entities;

determining that the at least one packet entity belongs to the first set of mutually related packets;

determining that the at least one packet entity does not belong to the second set of packet entities; and

storing at least part of one of the at least one packet entity.

12. A method according to claim 11, comprising further steps of

storing the at least one packet entity.

13. A method as claimed in claim 11 or 12, comprising the further steps of

receiving at least one further packet entity;

determining that the at least one further packet entity received belongs to the second set of packet entities;

and

directing said packet entities in accordance with said information contained in the at least one further packet entity.

14. A method as claimed in any of claims 11 to 13, wherein said at least one packet entity is stored until said required direction has been determined.

15. A method as claimed in any of claims 11 to 14, wherein when at least one packet entity has been stored for a predetermined time and said required direction has not been determined, a direction in which said at least one packet entity is to be sent is selected and said at least one packet entity is sent in said selected direction.

16. A method as claimed in any of claims 11 to 15, wherein when at least one packet entity has been stored for a predetermined time and said required direction has not been determined, said at least one packet is removed from a store.

17. A method as claimed in any of claims 11 to 16, wherein if a store storing said at least one packet entity has more than a predetermined amount of data stored therein, a direction in which said at least one packet entity is to be sent is selected and said at least one packet is sent in said selected direction.

18. A method as claimed in any of claims 11 to 17, wherein if a store storing said at least one packet entity has more than a predetermined amount of data stored therein said at least one packet is removed from said store.

19. A method as claimed in any of claims 11 to 18, wherein information from a header of at least one packet entity is stored.

20. A method as claimed in claim 19, wherein said stored information comprises at least one of the following:

source address; destination address and identification information.

21. A method as claimed in any of claims 11 to 20, wherein said direction comprises a PDP context and/or one of a plurality of bearers and/or a bearer.

22. A method as claimed in any of claims 11 to 21, wherein said direction information comprises said destination address.

23. Apparatus for directing a plurality of related packet entities, only one or some of said packet entities containing information relating to the direction of said packet entities, said apparatus comprising:

means for receiving said plurality of packet entities;

means for determining a required direction address from at least two of said packet entities containing said information; and

means for directing said plurality of related packet entities in the required direction.

24. Apparatus as claimed in claim 23, wherein said apparatus is usable as a node in a packet switched network.

25. Apparatus as claimed in claim 24, wherein said network is a GPRS network.

26. Apparatus as claimed in any of claims 23 to 25, wherein said apparatus is a GGSN.

27. A method for directing a packet to a required bearer of a set of bearers, the method comprising the steps of:

(a) receiving the packet;

(b) checking if the packet is a fragmented packet and if it is,

(c) checking if the packet comprises information related to selection of the required bearer and if it does,

storing fragmentation related information contained in the packet.

28. A method according to claim 27, comprising the further step of

forwarding the packet to the required bearer ;

29. A method according to claim 27 or 28, further comprising the steps

receiving a second packet

forwarding said second packet to the required bearer based on the fragmentation related information.

30. A method for directing a packet to a required bearer of a set of bearers, the method comprising the steps of:

(a) receiving the packet;

(b) checking if the packet is a fragmented packet and if it is,

(c) checking if the packet comprises information related to selection of the required bearer

and if it does not, storing fragmentation related information contained in the packet; and

storing said packet.

--

31. A method of claim 30 further comprising steps of:

receiving another packet containing information related to the selection of the required bearer; and

forwarding another packet and the stored packet(s) to the required bearer.

32. A method for directing packet entities, said method comprising the steps of:

receiving a first packet entity ;

checking if the first packet entity contains information relating to the direction of said entity;

storing at least part of said first packet entity; and

directing said first packet entity in accordance with said information.

33. Apparatus for directing a first set of mutually related packet entities, the first set containing a second set of mutually related packet entities; the packet entities of the second set containing information relating to the direction of said packet entities; the second set of packet entities containing at least one packet entity,

said apparatus comprising:

means for receiving at least one of said packet entities;

means for determining that the at least one packet entity belongs to the first set of mutually related packets;

means for determining that the at least one packet entity does not belong to the second set of packet entities; and

means for storing at least part of one of the at least one packet entity.